CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.15/KRIDL/CEMENT/2014-15

Date: 16.07.2014

TEST REPORT

CLIENT	:	**Asst. Executive Engineer,** T. Dasarahalli Sub Division, BBMP, Bangalore.
AGENCY	:	**Technical Manager (West),** KRIDL, Bangalore.
NAME OF THE WORK	:	Construction and improvements of RCC roads and drains at road adjacent to Ramachandra Hospital 4th Main, 1st Cross road in Ward No. 15, Dasarahalli, BBMP, Bangalore.
REFERENCE	:	EE/DD/WO/121/2014-15 Dated: 03.07.2014
SAMPLE ID	:	CEMENT
SAMPLES SUPPLIED BY	:	AGENCY

The results of the tests conducted on the cement sample are as follows:

Sl.No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 8112-1989
1	a) Initial Setting Time	IS-4031 (Part -5)	155 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5)	470 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part 3) by the Le-Ghatelier method	1 mm	Not more than 10 mm
3	Standard Consistency	IS-4031 (Part -4)	26.00 %	-

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ಟಿ. ದಾಸರಹಳ್ಳಿ ಉಪ ವಿಭಾಗ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರಪಾಲಿಕೆ
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Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.15/KRIDL/SAND/2014-15 : 16.07.2014

TEST REPORT ON FINE AGGREGATES (SAND)
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** T. Dasarahalli Sub Division, BBMP, Bangalore.

Agency : **Technical Manager (West),** KRIDL, Bangalore.

Name of Work : Construction and improvements of RCC roads and drains at road adjacent to Ramachandra Hospital 4th Main, 1st Cross road in Ward No. 15, Dasarahalli, BBMP, Bangalore.

Reference : EE/DD/WO/121/2014-15 Dated: 03.07.2014

Date of Testing : 16.07.2014

Material : Sand

Total Wt. of Aggregates in gms 2000

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits For Zone-II
10	0	0	0	100	100
4.75	91	4.55	4.55	95.5	90-100
2.36	264	13.20	17.75	82.3	75-100
1.18	421	21.05	38.80	61.2	55-90
600 Micron	472	23.60	62.40	37.6	35-59
300 Micron	514	25.70	88.10	11.9	8-30
150 Micron	146	7.30	95.40	4.6	0-10

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Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.15/KRIDL/AGG/2014-15 : 16.07.2014

TEST REPORT ON COARSE AGGREGATES
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** T. Dasarahalli Sub Division, BBMP, Bangalore.

Agency : **Technical Manager (West),** KRIDL, Bangalore.

Name of Work : Construction and improvements of RCC roads and drains at road adjacent to Ramachandra Hospital 4th Main, 1st Cross road in Ward No. 15, Dasarahalli, BBMP, Bangalore.

Reference : EE/DD/WO/121/2014-15 Dated: 03.07.2014

Date of Testing : 16.07.2014

Material : 40mm Aggregates

Total Wt. of Aggregates in gms 25000

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
80	0	0	0	100	100
40	997	3.99	3.99	96.01	95-100
20	16248	64.99	68.98	31.02	30-70
10	4986	19.94	88.92	11.08	10-35
4.75	2426	9.70	98.63	1.37	0-5

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Building & Highway Material Testing Laboratory

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Job No.: CTCE/BBMP/W.No.15/KRIDL/STEEL/2014-15 17.07.2014

TEST REPORT ON REINFORCEMENT STEEL

Client	:	**Asst. Executive Engineer,** T. Dasarahalli Sub Division, BBMP, Bangalore.
Agency	:	**Technical Manager (West),** KRIDL, Bangalore.
Name of the work	:	Construction and improvements of RCC roads and drains at road adjacent to Ramachandra Hospital 4th Main, 1st Cross road in Ward No. 15, Dasarahalli, BBMP, Bangalore.
Reference	:	EE/DD/WO/121/2014-15 Dated: 03.07.2014
Date of Test	:	17.07.2014
Technical Reference	:	IS: 1786-2008

Sl. No	Nominal size (dia) (mm)	Mass per metre (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm²	Tensile strength (Ultimate stress) N/mm²	Elongation percent gauge length		
1	8	0.40	512	549	12.45	O.K	O.K

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Job No.: CTCE/BBMP/W.No.15/KRIDL/STEEL/2014-15 17.07.2014

TEST REPORT ON REINFORCEMENT STEEL

Client	:	**Asst. Executive Engineer,** T. Dasarahalli Sub Division, BBMP, Bangalore.
Agency	:	**Technical Manager (West),** KRIDL, Bangalore.
Name of the work	:	Construction and improvements of RCC roads and drains at road adjacent to Ramachandra Hospital 4th Main, 1st Cross road in Ward No. 15, Dasarahalli, BBMP, Bangalore.
Reference	:	EE/DD/WO/121/2014-15 Dated: 03.07.2014
Date of Test	:	17.07.2014
Technical Reference	:	IS: 1786-2008

Sl. No	Nominal size (dia) (mm)	Mass per metre (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm²	Tensile strength (Ultimate stress) N/mm²	Elongation percent gauge length		
1	10	0.62	515	553	12.70	O.K	O.K

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Job No.: CTCE/BBMP/W.No.15/KRIDL/CUBE/2014-15

18.08.2014

TEST REPORT ON CONCRETE CUBES

Client	: **Asst. Executive Engineer,** T. Dasarahalli Sub Division, BBMP, Bangalore.
Agency	: **Technical Manager (West),** KRIDL, Bangalore.
Name of the work	: Construction and improvements of RCC roads and drains at road adjacent to Ramachandra Hospital 4th Main, 1st Cross road in Ward No. 15, Dasarahalli, BBMP, Bangalore.
Reference	: EE/DD/WO/121/2014-15 Dated: 03.07.2014
Sample ID	: Cement Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28^{th} day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	21.07.2014	18.08.2014	8.237	502.8	22.35
2	21.07.2014	18.08.2014	8.112	485.2	21.56
3	21.07.2014	18.08.2014	8.373	519.3	23.08

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